U.S. Department
of Transportation
**Pipeline and
Hazardous Materials
Safety Administration**

400 Seventh Street, S.W.
Washington, D.C. 20590

IAEA CERTIFICATE OF COMPETENT AUTHORITY
SPECIAL FORM RADIOACTIVE MATERIALS
CERTIFICATE USA/0502/S-96, REVISION 6

This certifies that the sources described have been demonstrated to meet the regulatory requirements for special form radioactive material as prescribed in the regulations of the International Atomic Energy Agency[1] and the United States of America[2] for the transport of radioactive material.

1. Source Identification - QSA Global, Inc. Model Nos. X54 (Manufactured before January 1, 1998), X540 (Manufactured on or after February 17, 1981), and X540/1 (Manufactured on or after September 27, 2000).

2. Source Description - Tungsten inert gas or laser seal welded cylindrical single or double encapsulations. The outer encapsulation is made of titanium or stainless steel and the inner encapsulation, if used, is made of titanium, stainless steel, or aluminum. Approximate exterior dimensions are 5.15 mm (0.2 in.) maximum diameter and 15.15 mm (0.6 in.) in length (Model X54); and 5.16 mm (0.2 in.) in diameter and 7.65 mm (0.3 in.) in length (Models X540 and X540/1). Construction shall be in accordance with attached Amersham Drawing No. A10639, Issue C (Model X54) or QSA Global Inc. Drawing No. R87527, Rev. G (Models X540 and X540/1).

3. Radioactive Contents - No more than 17.0 TBq (459.5 Ci) of Cobalt-60 (Model X54); or no more than either 20.0 TBq (540.5 Ci) of Cobalt-60, 17.0 TBq (459.5 Ci) of Iridium-192, or 5.56 TBq (150.3 Ci) of Selenium-75 (Models X540 and X540/1). The Co-60, Ir-192, and Se-75 are in the form of a metal.

4. Quality Assurance - Records of Quality Assurance activities required by Paragraph 310 of the IAEA regulations[1] shall be maintained and made available to the authorized officials for at least three years after the last shipment authorized by this certificate. Consignors and consignees in the United States exporting or importing shipments under this certificate shall satisfy the requirements of Subpart H of 10 CFR 71.

5. Expiration Date - This certificate expires on January 31, 2008. On July 31, 2006, this certificate supersedes all previous revisions of USA/0502/S-96.

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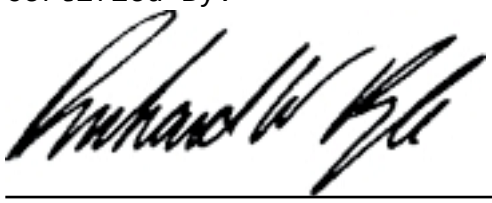
[1] "Regulations for the Safe Transport of Radioactive Material, 1996 Edition (Revised), No. TS-R-1 (ST-1, Revised)," published by the International Atomic Energy Agency(IAEA), Vienna, Austria.

[2] Title 49, Code of Federal Regulations, Parts 100-199, United States of America.

CERTIFICATE USA/0502/S-96, REVISION 6

This certificate is issued in accordance with paragraph 804 of the IAEA Regulations and Section 173.476 of Title 49 of the Code of Federal Regulations, in response to the May 30, 2006 petition by QSA Global, Inc., Burlington, MA and in consideration of other information on file in this Office.

Certified By:



Robert A. McGuire
Associate Administrator for Hazardous Materials Safety

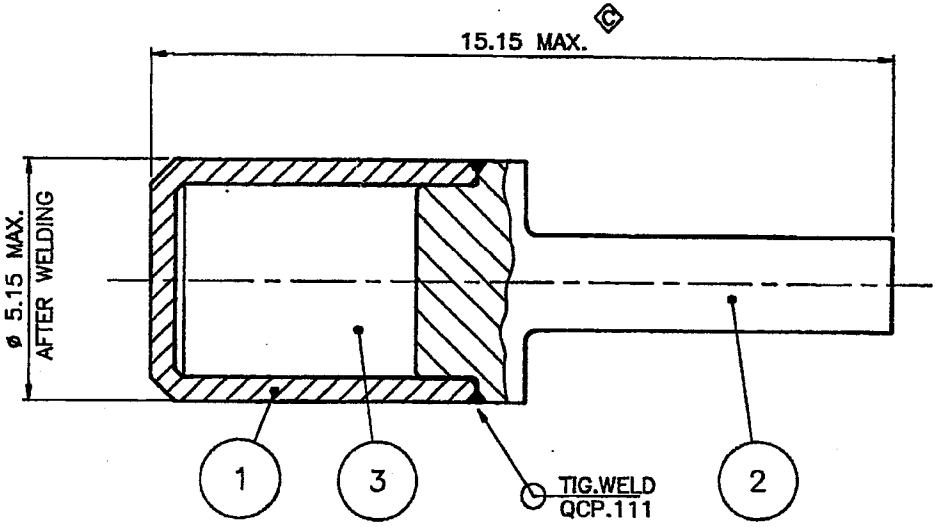
Jun 15 2006
(DATE)

Revision 6 - Issued to modify cavity length of Models X540 and X540/1.

DRG NO. A10639

Item	Description	Material	Drawing No.	No.off
1	BODY	STAIN.STL.	A10636 ITEM.1	1
2	PLUG	STAIN.STL.	A10638	1
3	ACTIVE MATERIAL			—

FOR ENGRAVING DETAIL
SEE DRAWING A62615



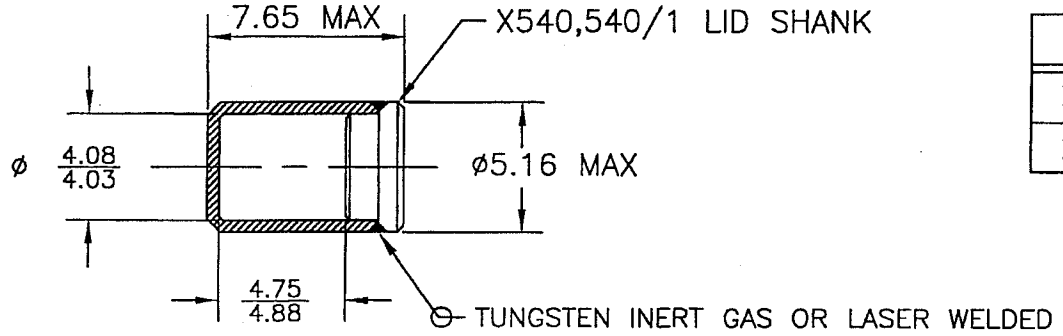
ACTUAL SIZE

TOLERANCES	MATERIAL	GENERAL NOTES	SCALE	C	MS1211	4.1.95	M.A.			
UNLESS OTHERWISE STATED	—	THIRD ANGLE PROJECTION MODIFICATIONS INDICATED BY ISSUE IN ◇ THIS DRAWING CONFORMS TO BS308. ALL DIMENSIONS IN MILLIMETRES UNLESS OTHERWISE STATED. DO NOT SCALE	10:1	ISSUE	MOD No.	DATE	DRAWN	CHECKED	APPROVED	QA APPROVED

Amersham The Health Science Group

TITLE ASSEMBLY OF CAPSULE X54

SURFACE TEXTURE	FINISH	APPROVAL	USED ON	SHT. SIZE	DRG NO.	SHT OF SHTS
UNLESS OTHERWISE STATED —	REMOVE ALL BURRS	THIS DRAWING IS NOT TOO BE USED FOR ANY PURPOSE UNLESS SIGNED AS APPROVED	—	A3	A10639	1 OF 1



MODEL	MATERIAL
X540	316L STAINLESS STEEL
X540/1	TITANIUM

NOTES:

1. INTERNAL VOID TO BE 0.010 mL OR GREATER.
2. MATERIAL: SEE TABLE
3. INNER CAVITY DIMENSIONS MAY VARY. METALLIC SPACERS, SPRINGS AND GUARDS WHICH SECURE AND/OR LOCATE THE RADIOACTIVE MATERIAL OR INNER SOURCE CAPSULE WITHIN THE CAPSULE MAY BE USED.
4. MINIMUM WALL THICKNESS TO BE 0.22.
5. DIMENSIONS ARE IN MILLIMETERS

NOTES:
1. MATERIAL: SEE TABLE

APPROVALS	DATE
D. Price	30 May, 06
	30 May 06

UNLESS OTHERWISE SPECIFIED
DIMENSIONS IN INCHES
TOLERANCES:
FRACTIONS ± 1/8
X.X ± 0.12
X.XX ± 0.06
X.XXX ± 0.020

QSA GLOBAL
40 NORTH AVE, BURLINGTON, MA 01803

DESCRIPTIVE DRAWING

TITLE X540 CAPSULE SERIES

ERF #	1402

SIZE	DWG. NO.	REV
A	R87527	G
	SCALE: NONE	SHEET 1 OF 1